

REMARKS

The application now includes claims 1-103. Claim 68 was amended.

In response to the restriction requirement applicants elect group 1, including claims 1-67, with partial traverse.

Claim 68 was amended to remove the term *in vivo* in order to emphasize the fact that claims 1 and 68 should be examined together.

Groups 1 and 2, including independent claims 1 and 68, respectively, relate to the same special technical feature and should be examined together. Following is a comparison of claims 1 and 68, which shows that claims 1 and 68 relate to the same special technical feature.

Claim 1 relates to: "a method of training a biological neural network using a controller", and claim 68 relates to: "Apparatus for training a neural network".

Claim 1 requires "stimulating a neural network by said controller applying at least an input signal to the network", and claim 68 requires "an input stimulator that generates an input stimulation to said network".

Claim 1 requires: "detecting an output response of the network by said controller", and claim 68 requires "a detector that detects at least an indication of a response of said network".

Claim 1 requires "modifying said stimulation by said controller for at least a period of time if said response matches a desired at least approximate response", and claim 68 requires: "a controller that selectively controls said input stimulator such that if a desired output is detected, said input stimulation is changed".

Accordingly, applicant requests that the Examiner examine claims 1-82.

An action on the merits is respectfully awaited.

Respectfully submitted,
Shimon Marom, et al.

Yaakov Schatz
Yaakov Schatz
Reg. No. 44,320

January 6, 2005
William H. Dippert, Esq.
Reed Smith LLP
599 Lexington Avenue, 29th Floor
New York, NY 10022-7650
Tel: (212) 521-5400

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
PAUL FENSTER
FENSTER & COMPANY PATENT ATTORNEY
P.O. BOX 10256
PETACH TIKVA, ISRAEL 49002

PCT

COMMUNICATION IN CASES FOR WHICH
NO OTHER FORM IS APPLICABLE

Applicant's or agent's file reference 246/02624	Date of Mailing <i>(day/month/year)</i> 25 February 2004 (25.02.2004)
International application No. PCT/IL02/00204	International filing date <i>(day/month/year)</i> 13 March 2002 (13.03.2002)
Applicant WIDE HORIZON HOLDINGS INC.	

1. ☐ REPLY DUE within _____ months/days from the above date of mailing

☒ NO REPLY DUE

2. COMMUNICATION:

The International Preliminary Examination Report (IPER) mailed by the IPEA/US on 09 October 2003 failed to properly list the claims in Box V. Although claims 1-103 were indicated as meeting the criteria set out in PCT Articles 33(2)-(4) in the Citations and Explanations section of Box V, the Statement section of Box V contained inconsistent information. The Corrected IPER attached hereto includes the corrected listing of the claims in the Statement section of Box V. No other changes have been made.

Name and mailing address of the IPEA/US
Mail Stop PCT, Attn: IPEA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703)305-3230

Authorized officer

Harry C Kim *LC*

Telephone No. 703-305-3257

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 246/02624	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IL02/00204	International filing date (day/month/year) 13 March 2002 (13.03.2002)	Priority date (day/month/year) 13 March 2001 (13.03.2001)
International Patent Classification (IPC) or national classification and IPC IPC(7): A61B 5/00 and US CL.: 600/554; 607/48; 128/925		
Applicant WIDE HORIZON HOLDINGS INC.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u> </u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 10 October 2002 (10.10.2002)	Date of completion of this report 08 August 2002 (08.08.2002)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Carl H. Layno <i>Siame Smith f</i> Telephone No. (703) 308-3694	

Form PCT/IPEA/409 (cover sheet) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/IL02/00204

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed.
- ☒ the description:
pages 1-73 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____

- ☒ the claims:
pages 74-83 as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages NONE, filed with the letter of _____

- ☒ the drawings:
pages 1-12 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____

- ☐ the sequence listing part of the description:
pages NONE as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE
- ☒ the claims, Nos. NONE
- ☒ the drawings, sheets/fig. NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(e)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/IL02/00204

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-103</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-103</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-103</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1, 6, 7, 9, 11, 14, 15, and 24 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest details reciting method steps used in training "biological" neural networks. The Tumey et al '896 patent describes the training of an "electrical" neural network made up of electronic circuits rather than a "biological" one. The applicant's claims are all drawn to training the neural network within a person (i.e. comprising neurons).

Claims 2-5, 8, 10, 12, 13, 16-23, and 25-103 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest details regarding modifications to localized stimulation (claims 2-5,8), the application of magnetic, chemical, or electric field stimulations (claims 10,12,13), various neural network output responses (claims 16-23), in-vitro growth of a neural network (claims 25-28), various details regarding in-vivo growth of a neural network both in animals and humans (claims 29-99), and various aspects of training the neural network while a patient is drugged (claims 100-103).